

THE INVENTION CLAIMED IS:

1. A method for validation of a service request in a distributed computing system comprising:

providing a request for service;

5 providing a plurality of channels connected to the client; and

providing first and second processes connected to the plurality of channels for validating the request for service;

determining in the first and second processes that the request for service has not been previously validated;

10 transmitting from the first and second processes messages having information indicative of the transmitting from the first or second process and the request for service;

storing the information in the first and second processes; and

15 accepting the request for service in the first or second process after the messages are transmitted and message related information is different from the information stored in the respective first or second process.

20 2. The method of validating a service request as claimed in claim 1 including: rejecting the request for service in the first or second process when the message related information is the same as the information stored in the respective first or second process.

3. The method of validating a service request as claimed in claim 1 wherein: transmitting the message broadcasts the message; storing the information stores the information after broadcasting the message; and the message contains the message related information.

25 4. The method of validating a service request as claimed in claim 1 wherein: transmitting the message sends the message; and storing the information stores the information after receiving the sent message.

30 5. The method of validating a service request as claimed in claim 1 wherein: transmitting the message sends the message; and storing the information stores the information after receiving the sent message; and including:

executing a consensus after receiving the message to propose consensus information;
and

the consensus information is the message related information.

6. A method of validating a service request comprising:

providing a request for service;

providing a plurality of channels connected to the client;

providing a plurality of processes connected to the plurality of channels for validating
the request for service:

determining in the plurality of processes that the request for service has not been
previously validated;

transmitting from the plurality of processes values indicative of the transmitting from
the each of the plurality of processes and the request for service;

storing the value in the plurality of processes; and

accepting the request for service in one of the plurality of processes after the value is
transmitted and a value related to the value transmitted is different from the
value stored in the one of the plurality of processes.

7. The method of validating a service request as claimed in claim 6 including:

rejecting the request for service in others of the plurality of processes when the value
related to the value transmitted is the same as the value stored in the others of
the plurality of processes.

8. The method of validating a service request as claimed in claim 6 wherein:

transmitting the value broadcasts the value; and

storing the value stores the value after the value is broadcast.

9. The method of validating a service request as claimed in claim 6 wherein:

transmitting the value sends the value; and

storing the value stores the value after receiving the sent value.

10. The method of validating a service request as claimed in claim 6 wherein:

transmitting the value by sending; and

storing the value stores the value after receiving the sent value;

and including:

executing a consensus after receiving the value to propose a consensus value; and
the consensus value is the value related to the value transmitted.

11. A distributed computing system comprising:
a client for providing a request for service;
a plurality of channels connected to the client; and
first and second processes connected to the plurality of channels for validating the
request for service wherein the first and second processes each includes:
means for determining that the request for service has not been previously
validated;
means for transmitting a message having information indicative of the
transmitting from the first or second process and the request for
service;
means for storing the information; and
means for accepting the request for service in the first or second process after
the message is transmitted and message related information is different
from the information stored in the respective first process or second
process.
12. The distributed computing system as claimed in claim 11 wherein:
the first and second processes each includes means for rejecting the request for
service in the first or second process when the message related information is
the same as the information stored in the respective first or second process.
13. The distributed computing system as claimed in claim 11 wherein:
the means for transmitting the message broadcasts the message; and
the means for storing the information stores the information after broadcasting the
message and the message contains the message related information.
14. The distributed computing system as claimed in claim 11 wherein:
the first and second processes include means for transmitting the message by sending;
and
the first and second processes each include means for storing the information after
receiving the sent message.
15. The distributed computing system as claimed in claim 11 wherein:
the first and second processes include means for transmitting the message by sending;
the first and second processes each include means for storing the information after
receiving the sent message;

the first and second processes each includes means for executing a consensus after receiving the message to propose consensus information; and the consensus information is the message related information.

16. A distributed computing system comprising:

a client for providing a request for service;

a plurality of channels connected to the client; and

a plurality of processes connected to the plurality of channels for validating the request for service wherein the plurality of processes each includes:

means for determining that the request for service has not been previously validated;

means for transmitting a value indicative of the transmitting from the one of the plurality of processes and the request for service;

means for storing the value; and

means for accepting the request for service in the one of the plurality of processes after the value is transmitted and a value related to the value transmitted is different from the value stored in the one of the plurality of processes.

17. The distributed computing system as claimed in claim 16 wherein:

the plurality of processes each includes means for rejecting the request for service in others of the plurality of processes when the value related to the value transmitted is the same as the value stored in the others of the plurality of processes.

18. The distributed computing system as claimed in claim 16 wherein:

the means for transmitting the value broadcasts the value; and

the means for storing the value stores the value after the value is broadcast.

19. The distributed computing system as claimed in claim 16 wherein:

the plurality of processes include means for transmitting the value by sending; and

the plurality of processes each includes means for storing the value after receiving the sent value.

20. The distributed computing system as claimed in claim 16 wherein:

the plurality of processes includes means for transmitting the value by sending;

the plurality of processes each includes means for storing the value after receiving the sent value;

the plurality of processes each includes means for executing a consensus after receiving the value to propose a consensus value; and

5 the consensus value is the value related to the value transmitted.